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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,140	05/19/2006	Juan Aymami Bofarull	14455.886US01	9252
43430 7590 06/29/2009 BERENBAUM, WEINSHIENK & EASON, P.C 370 17TH STREET SUITE 4800 DENVER, CO 80202				
EXAMINER AULAKH, CHARANJIT				
ART UNIT		PAPER NUMBER		
1625				
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06/29/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/580,140

**Applicant(s)**

AYMAMI BOFARULL ET AL.

**Examiner**

Charanjit S. Aulakh

**Art Unit**

1625

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 4-6, 12, 13 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20 is/are rejected.
- 7) ☒ Claim(s) 1-3, 7-11, 14, 16-19, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/808)  
Paper No(s)/Mail Date 3/2/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. According to paper filed on May 22, 2009, the applicants have elected group V with traverse for further prosecution.

#### ***Response to Arguments***

2. Applicant's arguments filed on May 22, 2009 regarding restriction requirement have been fully considered but they are not persuasive. The examiner does not agree with the applicants arguments regarding first alternative that subject matter of claims 1-22 do have a common core which is quinoline or quinoline derivative/ analogs. In the instant compounds, variables B and L are critical for the common core of these compounds. However, the examiner does agree with the applicant's arguments regarding second alternative. Therefore, group XIII is combined with the elected group V. In addition, groups VI, VII, VIII, XIV, XV and XVI are also combined with the elected group V. Thus, groups V, VI, VII, VIII, XIII, XIV, XV and XVI are examined.

3. Claims 1-22 are pending in the application. Claims 4-6, 12, 13 and 15 are withdrawn from further consideration as being drawn to non-elected inventions.

#### ***Specification***

4. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

#### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The following eight different factors (see *Ex parte Foreman*, 230 USPQ at 547; *Wands*, *In re*, 858.F. 2d 731, 8 USPQ 2d 1400, Fed. Cir. 1988) must be considered in order for the specification to be enabling for what is being claimed:

Quantity of experimentation necessary, the amount of direction or guidance provided, presence or absence of working examples, the nature of the invention, the state of the prior art, the relative skill of those in the art, the predictability or unpredictability and the breadth of claims. In the instant case, the specification is not enabling based on at least four of the above mentioned eight different factors such as quantity of experimentation necessary, the amount of direction or guidance provided, presence of working examples, state of the prior art, unpredictability and the breadth of claims.

The instant specification teaches inhibitory effect of instant compounds *in vitro* using Jurkat clon E6-1 and GLC-4 cell lines ( see page 25 and table 1 on page 26. Based on these teachings, the instant compounds will have utility for treating these two cancers represented by these two cell lines only. There is no teaching or guidance present either in the specification or prior art references provided to show that compounds having inhibitory effect *in vitro* in these two cell lines are well known in the art to have therapeutic utility for treating every known cancer in the art. There is no teaching or guidance present regarding mechanism of action of instant compounds such as

inhibition of specific enzymes, receptors etc. There are no working examples present showing inhibitory effect of instant compounds in known in vitro cell lines of every known cancer in the art. The instant compounds of formula (I) encompasses hundreds of thousands of compounds based on the values of variables R1-R12, B, L and G2 and therefore, in absence of such teachings, guidance, working examples and prior art, it would require undue experimentation to demonstrate efficacy of instant compounds in known in vitro cell lines of every known cancer in the art and hence their utility for treating every known cancer.

7. Claims 1-3, 7-11, 14 and 16-22 are objected for containing non-elected subject matter.

***Allowable Subject Matter***

8. The following is a statement of reasons for the indication of allowable subject matter: The instant compounds directed to the elected subject matter are allowable over the prior art since they are neither disclosed nor obvious over the prior art. In the prior art, Takeuchi ( Chem. Pharm. Bull., cited on applicant's form 1449 ) discloses synthesis and antitumor activity of fused quinoline derivatives ( see compounds in tables 1 and 2 on pages 406-408 ) which are closely related to instant compounds. However, the compounds of Takeuchi differ from the instant compounds in lacking instant L-G2 group attached to fused quinoline ring structure and furthermore, there is no teaching, suggestion or motivation in the prior art to modify the compounds of Takeuchi to prepare the instant compounds.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charanjit S. Aulakh whose telephone number is (571)272-0678. The examiner can normally be reached on Monday through Friday, 8:30 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on (571)272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charanjit S. Aulakh/  
Primary Examiner, Art Unit 1625